

### Nano MQS

TE Internal #: 2177588-2 Housing for Female Terminals, Wire-to-Device / Wire-to-Board, 20 Position, .071 in [1.8 mm] Centerline, Black, Signal, Nano MQS View on TE.com >



Connectors > Automotive Connectors > Connector Housings > MQS, CONNECTOR HOUSING



Connector & Housing Type: Housing for Female Terminals

Mating Tab Width: .5 mm [.02 in ]

Connector System: Wire-to-Board, Wire-to-Device

Number of Positions: 20

Centerline (Pitch): 1.8 mm [.071 in ]

### All MQS, CONNECTOR HOUSING (557)

### Features

### Product Type Features

Connector & Housing Shape

Connector & Housing Type

Rectangular

Housing for Female Terminals

Connector System	Wire-to-Board, Wire-to-Device
Sealable	No
Hybrid Connector	No
Primary Locking Feature	On the Terminal
Configuration Features	
Number of Positions	20
Number of Rows	2
Electrical Characteristics	
Operating Voltage	12 VDC
Nominal Voltage Architecture	12 V
Body Features	
Cable Exit Angle	180°
Body Material	PBT GF
Primary Product Color	Black
Connector Code	В

Housing for Female Terminals, Wire-to-Device / Wire-to-Board, 20 Position, .071 in [1.8 mm] Centerline, Black, Signal, Nano MQS



## **Contact Features**

[212 °F][221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operation/ApplicationSignalCircuit ApplicationSignalPackaging FeaturesSolutionPackaging MethodBoxOtherServiceableServiceableYes		
Mating Tab Width.5 mm(02 in)Mechanical AttachmentMounting FeatureWithoutTerminal Position AssuranceYesStrain ReliefWithoutMating Alignment TypeKeyedMating Alignment TypeCable Mount (Free Hanging)Housing FeaturesCable Mount (Free Hanging)Ecenterline (Pitch)1.8 mm(071 in)Dimensions22.3 mm(878 in)Product Width14.8 mm(583 in)Product Height16.4 mm(546 in)Row-to-Row Spacing5.9 mm(232 in)Usage ConditionsOperating Temperature (Max)20°C, 75°C, 80°C, 85°C, 90°C, 100°C, 100°C, 105°C(158°FT)(58	Contact Size	.5mm
Mechanical Attachment     Mounting Feature   Without     Terminal Position Assurance   Yes     Strain Relief   Without     Mating Alignment Type   Keyed     Mating Alignment Type   Keyed     Mating Alignment Type   Cable Mount (Free-Hanging)     Housing Features   Cable Mount (Free-Hanging)     Connector Mounting Type   Cable Mount (Free-Hanging)     Housing Features   Catterline (Pitch)     Centerline (Pitch)   1.8 mm[.071 in]     Dimensions   2.2 mm[.078 in]     Product Width   14.8 mm[.464 in]     Row-to-Row Spacing   S.9 mm[.232 in]     Usage Conditions   Jos *Cr_100 *C, 100 *C,	Contact Type	Receptacle
Mounting FeatureWithoutTerminal Position AssuranceYesStrain ReliefWithoutMating Alignment TypeKeyedMating Alignment TypeKeyedMating Alignment TypeCable Mount (Free-Hanging)Housing FeaturesCable Mount (Free-Hanging)Housing Features1.8 mm(.071 in)Dimensions1.8 mm(.583 in)Product Width14.8 mm(.583 in)Product Length22.3 mm(.8/8 in)Product Length5.9 mm(.232 in)Usage Conditions5.9 mm(.232 in)Usage Conditions70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C(158 °F)[197 °F][185 °F][194 (212 °F)]21 °F]Operating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 1100 °C, 105 °C(158 °F)[197 °F][185 °F][194 (212 °F)]221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operating MethodSignalPackaging MethodBoxOtherSignalServiceableYes	Mating Tab Width	.5 mm[.02 in]
Terminal Position AssuranceYesStrain ReliefWithoutMating Alignment TypeKeyedMating AlignmentWithConnector Mounting TypeCable Mount (Free-Hanging)Housing FeaturesCable Mount (Free-Hanging)Centerline (Pitch)1.8 mm[.071 in]Dimensions1.8 mm[.071 in]Product Width14.8 mm[.583 in]Product Length22.3 mm[.878 in]Product Height16.4 mm[.646 in]Row-to-Row Spacing5.9 mm[.232 in]Usage Conditions10°C, 7.5 °C, 80 °C, 80 °C, 90 °C, 100 °C, 105 °C[1168 °T][167 °T][176 °T]	Mechanical Attachment	
Strain ReliefWithoutMating Alignment TypeKeyedMating AlignmentWithConnector Mounting TypeCable Mount (Free-Hanging)Housing FeaturesCanterline (Pitch)Centerline (Pitch)1.8 mm[.0/1 in]DimensionsProduct WidthProduct Width14.8 mm[.583 in]Product Height22.3 mm[.878 in]Row-to-Row Spacing5.9 mm[.232 in]Usage ConditionsVUperating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[.107 °F][176 °F][176 °F][185 °F][194 [212 °F][221 °F]Operating Temperature Range-10-105 °C[-40 - 221 °F]Operating Temperature Range-10-105 °C[-40 - 221 °F]Operating Temperature Range-10-105 °C[-40 - 221 °F]Operating Temperature RangeSignalPackaging MethodBoxOtherSignalServiceableYes	Mounting Feature	Without
Mating Alignment TypeKeyedMating AlignmentWithConnector Mounting TypeCable Mount (Free-Hanging)Housing Features	Terminal Position Assurance	Yes
Mating AlignmentWithConnector Mounting TypeCable Mount (Free-Hanging)Housing FeaturesCenterline (Pitch)1.8 mm[.071 in]Dimensions1.8 mm[.071 in]Product Width14.8 mm[.583 in]Product Length22.3 mm[.878 in]Product Length22.3 mm[.878 in]Row-to-Row Spacing5.9 mm[.232 in]Usage Conditions	Strain Relief	Without
Connector Mounting Type Cable Mount (Free-Hanging)   Housing Features I.8 mm[.071 in]   Centerline (Pitch) 1.8 mm[.071 in]   Dimensions Product Width   Product Length 22.3 mm[.878 in]   Product Length 22.3 mm[.878 in]   Product Length 16.4 mm[.646 in]   Row to Row Spacing 5.9 mm[.232 in]   Usage Conditions 70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][194 [212 °F][21 °F]   Operating Temperature (Max) 70 °C, 75 °C, 80 °C, 45 °C, 90 °C, 100 °C, 105 °C[158 °F][194 [212 °F][21 °F]   Operating Temperature Range -40 – 105 °C[-40 – 221 °F]   Operation/Application Signal   Packaging Method Box   Other Serviceable	Mating Alignment Type	Keyed
Housing FeaturesCenterline (Pitch)1.8 mm[.071 in]Dimensions1.8 mm[.071 in]Product Width14.8 mm[.583 in]Product Length22.3 mm[.878 in]Product Length16.4 mm[.646 in]Row to Row Spacing5.9 mm[.232 in]Usage Conditions5.9 mm[.232 in]Usage Conditions0°C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[.158 °F][167 °F][176 °F][185 °F][194 °F]Operating Temperature (Max)0°C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[.158 °F][167 °F][176 °F][176 °F][185 °F][194 °F]Operating Temperature Range40 – 105 °C[-40 – 221 °F]Operating Temperature Range40 – 105 °C[-40 – 221 °F]Circuit ApplicationSignalPackaging FeaturesSignalPackaging MethodBoxOtherServiceableServiceableYes	Mating Alignment	With
Centerline (Pitch)1.8 mm[.071 in]DimensionsProduct Width14.8 mm[.583 in]Product Length22.3 mm[.878 in]Product Height16.4 mm[.646 in]Row-to-Row Spacing5.9 mm[.232 in]Usage ConditionsVage ConditionsOperating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F]]194 [212 °F][221 °F]Operating Temperature Range-40 - 105 °C[-40 - 221 °F]Operation/ApplicationSignalPackaging FeaturesSignalPackaging MethodBoxOtherServiceableYesYes	Connector Mounting Type	Cable Mount (Free-Hanging)
DimensionsProduct Width14.8 mm[.583 in]Product Length22.3 mm[.878 in]Product Length16.4 mm[.646 in]Row-to-Row Spacing5.9 mm[.232 in]Usage ConditionsOperating Temperature (Max)Operating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F][194 [212 °F][221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operation/ApplicationCircuit ApplicationSignalPackaging Features-Packaging MethodBoxCherServiceableYesYes	Housing Features	
Product Width14.8 mm[.583 in]Product Length22.3 mm[.878 in]Product Height16.4 mm[.646 in]Row-to-Row Spacing5.9 mm[.232 in]Usage ConditionsUsage ConditionsOperating Temperature (Max)Operating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][165 °F][194 (212 °F][221 °F]Operating Temperature Range-40 – 105 °C[40 – 221 °F]Operation/ApplicationSignalPackaging FeaturesPackaging MethodBoxOtherServiceableVerviceableYes	Centerline (Pitch)	1.8 mm[.071 in]
Product Length22.3 mm[.878 in]Product Height16.4 mm[.646 in]Row-to-Row Spacing5.9 mm[.232 in]Usage ConditionsUsage Conditions70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F][194 [212 °F][221 °F]Operating Temperature (Max)70 °C, 75 °C, 40 °C, 45 °C, 90 °C, 100 °C, 105 °C[140 - 221 °F]Operating Temperature Range-40 - 105 °C[-40 - 221 °F]Operating Temperature Range-40 - 105 °C[-40 - 221 °F]Operation/ApplicationSignalPackaging FeaturesSignalPackaging MethodBoxOtherServiceableYesYes	Dimensions	
Product Height16.4 mm[.646 in]Row-to-Row Spacing5.9 mm[.232 in]Usage ConditionsUsage ConditionsOperating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][175 °F][174 °[185 °F][194 °[212 °F][221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operating Temperature RangeSignalPackaging FeaturesSignalPackaging MethodBoxOtherServiceableServiceableYes	Product Width	14.8 mm[.583 in]
Row-to-Row Spacing 5.9 mm[.232 in]   Usage Conditions 70°C, 75°C, 80°C, 85°C, 90°C, 100°C, 105°C[158°F][176°F][185°F][194   Operating Temperature (Max) 70°C, 75°C, 80°C, 85°C, 90°C, 100°C, 105°C[158°F][176°F][185°F][194   Operating Temperature Range -40 – 105°C[-40 – 221°F]   Operating Temperature Range -40 – 105°C[-40 – 221°F]   Operation/Application Signal   Packaging Features Signal   Packaging Method Box   Other Serviceable	Product Length	22.3 mm[.878 in]
Usage ConditionsOperating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][185 °F][194 [212 °F][221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operation/Application-40 – 105 °C[-40 – 221 °F]Circuit ApplicationSignalPackaging Features-Packaging MethodBoxOtherServiceableYesYes	Product Height	16.4 mm[.646 in]
Operating Temperature (Max)70 °C, 75 °C, 80 °C, 85 °C, 90 °C, 100 °C, 105 °C[158 °F][167 °F][176 °F][185 °F][194 [212 °F][221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operation/ApplicationSignalCircuit ApplicationSignalPackaging FeaturesSignalOtherServiceableServiceableYes	Row-to-Row Spacing	5.9 mm[.232 in]
105 °C[158 °F][167 °F][176 °F][185 °F][194 [212 °F]221 °F]Operating Temperature Range-40 – 105 °C[-40 – 221 °F]Operation/ApplicationSignalCircuit ApplicationSignalPackaging FeaturesSignalPackaging MethodBoxOtherServiceableServiceableYes	Usage Conditions	
Operation/Application Signal   Circuit Application Signal   Packaging Features Box   Other Serviceable	Operating Temperature (Max)	105 °C[158 °F][167 °F][176 °F][185 °F][194 °F]
Circuit ApplicationSignalPackaging FeaturesBoxPackaging MethodBoxOtherYes	Operating Temperature Range	-40 – 105 °C[-40 – 221 °F]
Packaging Features Box   Packaging Method Box   Other Yes	Operation/Application	
Packaging MethodBoxOtherYes	Circuit Application	Signal
Other Serviceable Yes	Packaging Features	
Serviceable Yes	Packaging Method	Box
	Other	
Connector Position Assurance Capable No	Serviceable	Yes
	Connector Position Assurance Capable	No

# Product Compliance

For compliance documentation, visit the product page on TE.com>

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EU RoHS Directive 2011/65/EU	Compliant
EU ELV Directive 2000/53/EC	Compliant
China RoHS 2 Directive MIIT Order No 32, 2016	No Restricted Materials Above Threshold
EU REACH Regulation (EC) No. 1907/2006	Current ECHA Candidate List: JUNE 2022 (224) Candidate List Declared Against: JAN 2022 (223) SVHC > Threshold: Not Yet Reviewed
Halogen Content	Low Halogen - Br, Cl, F, I < 900 ppm per homogenous material. Also BFR/CFR/PVC Free
Solder Process Capability	Not reviewed for solder process capability

#### Product Compliance Disclaimer

This information is provided based on reasonable inquiry of our suppliers and represents our current actual knowledge based on the information they provided. This information is subject to change. The part numbers that TE has identified as EU RoHS compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, mercury, PBB, PBDE, DBP, BBP, DEHP, DIBP, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2011/65/EU (RoHS2). Finished electrical and electronic equipment products will be CE marked as required by Directive 2011/65/EU. Components may not be CE marked. Additionally, the part numbers that TE has identified as EU ELV compliant have a maximum concentration of 0.1% by weight in homogenous materials for lead, hexavalent chromium, and mercury, and 0.01% for cadmium, or qualify for an exemption to these limits as defined in the Annexes of Directive 2000/53/EC (ELV). Regarding the REACH Regulation, the information TE provides on SVHC in articles for this part number is based on the latest European Chemicals Agency (ECHA) 'Guidance on requirements for substances in articles' posted at this URL: https://echa.europa.eu/guidance-documents/guidance-on-reach

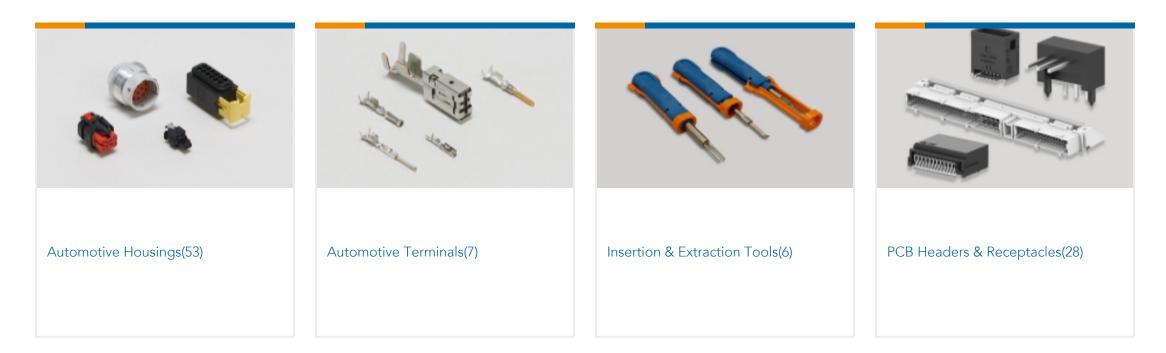
# **Compatible Parts**



Also in the Series | Nano MQS

Housing for Female Terminals, Wire-to-Device / Wire-to-Board, 20 Position, .071 in [1.8 mm] Centerline, Black, Signal, Nano MQS





# Customers Also Bought





TE Part #2177586-1



TE Part #4769632004

#### RNF-3000-6/2-3-STK

# Documents

Product Drawings 20POS NANO MQS TL PLUG HOUSING, CODE B

English

### CAD Files

### 3D PDF

3D

Customer View Model

#### ENG\_CVM\_CVM\_2177588-2\_G\_c-2177588-2-g.2d\_dxf.zip

English

Customer View Model

ENG\_CVM\_CVM\_2177588-2\_G\_c-2177588-2-g.3d\_igs.zip

English

Customer View Model

ENG\_CVM\_CVM\_2177588-2\_G\_c-2177588-2-g.3d\_stp.zip

English

By downloading the CAD file I accept and agree to the **Terms and Conditions** of use.

Housing for Female Terminals, Wire-to-Device / Wire-to-Board, 20 Position, .071 in [1.8 mm] Centerline, Black, Signal, Nano MQS



Datasheets & Catalog Pages Micro Quadlok Interconnection System (MQS)

English

Product Specifications Product Specification

English